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Designing and Developing Audio-Visual Materials (AVM) for Boosting EFL Learners' Oral Language Fluency

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Abstract

Science and technology have opened up umpteen numbers of application avenues for language education. Technologists engage in innovations and embark upon designing models in engineering field before manufacturing utilitarian items. The present study aims at exploring the impact of using innovated audio-visual materials (AVM) on enhancing the oral language fluency of the Saudi EFL students thereby resulting in improvement in their communication skills. The study used a quasi-experimental design in which 26 students at level 4 were recruited. They were assigned to speaking tasks before and after the implementation of Audio-Visual Materials (AVMs). In addition, the use of TikTok was examined as a tool for confronting issues or challenges faced in the teaching-learning process with regard to developing oral speaking fluency. Oral fluency was needed for exposing students to situations in classrooms or even online for encouraging them to be interactive and thereby gain practical learning experiences. The findings revealed that students' level in English speaking was acceptable (M=3.20). The students reported a high perception towards English language (M=3.45) prior to the experiment. They also reported a high level of perception (M=3.91) after the experiment. The difference between students' perception pre and post the experiment was found to be significant (P=.001). The study findings disclosed that the students showed significant gains and became more proficient in their oral English (speaking) skill after the implementation of AVMs in the teaching process. . The developed and innovated tools, integrated into the education system, were, of course, developed keeping social and cultural context in sharp focus.

Keywords: Al-aided Apps, audio visual materials (AVMs), learning, multi-media, oral language fluency, teaching, TikTok, research work.

1. Introduction

During the past ten to fifteen years, living styles, manufacturing, supply chains, services and marketing as well as international trade and global interaction have witnessed major changes (Kotabe & Helsen, 2022). Artificial Intelligence (AI) is the latest innovation which is an extension of three combined forces: telephony, computer and information communication technology (ICT) (Saba et al., 2021). Other technological developments have also played a critical role in revolutionizing work processes and affected other human activities – personal

needs, professional needs and tourism. In education, the process of teaching, in particular teaching of English has also dramatically changed as a result of the present era (Corbett, 2022). This significant development has forced the education sector to revisit its curricula, syllabi and review teaching material and equipment (entire infrastructure) including approaches taken and policy paradigm changed. Slowly and steadily, innovations made assiduously eased the learning and teaching processes and rendered them more interesting and full of pleasure (Sawyer & Henriksen, 2024). Moreover, self-learning materials are available and text books have been simplified. Today, students can access e-books which stored in e-libraries (Francis, 2023) and teachers can use smart boards in their classrooms. Computers are used for all purposes. Communication Labs are in place to teach listening and speaking skills (Kaur et al., 2022). Varieties of templates are available in computers with formatted forms for all needs which the user needs only to fill against printed lines calling for required particulars or information. Moreover, podcasts distributed online can support the process of teaching and learning English, specially in speaking classes (Al-Ahdal, 2020).

In view of what has been previously stated, distinctive changes are discernible and still constantly affect the teaching and learning processes. These technological changes have affected the methods to teaching and learning (Lei & Medwell, 2021). In sum, language teaching methods to teaching and learning English, in particular these methods for imparting knowledge and skills, including the oral language fluency need to be updated with innovative technologies for enhancing the processes and outcomes. Oral language fluency helps learners to become more presentable and more confident (Parab, 2015). The present study aimed to fill up this gap by evaluating the effectiveness of AVMs in enhancing students' oral language fluency (fluent speaking in English language). To achieve this aim, the study addressed the following research questions:

- 1. Is there any significant difference in the pre-test and post-test in the speaking proficiency levels among Saudi EFL students before and after utilizing the AVMs?
- 2. What is the significant difference found in assessment of pre-test and post-test attitudes of the Saudi students towards oral language fluency levels using AVMs?

2. Literature Review

Oral language fluency is the most important asset to students in becoming player in the world market scene. Today, students need to prove to be efficient and effective professionals especially in domestic and international activities (Sage, 2020). Present era students will write the development history of the nation through efficient personality disposition while engaged in any work field as they will have mastered oral language skill sooner than later. As stated by Gavilanes (2018), instances are galore where language teaching faculty members are obsessed with traditionally followed methods of teaching. They still feel more comfortable using hard-bound textbooks for four reasons: (i) lack of materials developed using multi-media Apps and AI devices for imparting instruction though the lofty aim remains the same – fostering, developing and assisting oral language fluency; (ii) lack of enthusiasm and zeal on the part of teachers to adopt latest/modern approaches, methods and multi-media assisted or generated materials; (iii)

Apathy or lethargy on the part of administrators, owners of educational institutions, top-rung bureaucrats otherwise responsible for framing policy and ensuring its implementation with seriousness that such changes deserve; and (iv) inadequate orientation courses, training/retraining imparted to the teachers and practically little encouragement given to the teachers for developing relevant materials using multi-media and choosing most appropriate Apps and AI-aided teaching devices which could enhance the oral language fluency of students. These reasons are, to great extent, responsible for tardy change management, thus resulting in language learners' limited ability to enhance their students' language fluency in speaking; they fumble at finding suitable or appropriate words; they lack confidence and exhibit shyness in interaction and dialogue (Kadyrbayeva, 2022)

One way to overcome these challenging issues especially in the EFL context is to design effective AVM for enhancing students' oral language skills. Several previous studies have reported the efficacy of AVM can in enhancing EFL learners' oral fluency (Bahrani, 2011; Chamba & Gavilanes, 2019; Mahmoudi & Tasnimi, 2023; Qizi, & Qizi, 2021). According to Chamba and Gavilanes (2019), original AVM was proved to enhance the fluency among university EFL students. These AVM aided two types of learning style students, i.e. those visual and auditory learners (Al-Ahdal et al., 2021, 2023; Mahmoudi & Tasnimi, 2023). In addition, Bahrani (2011) affirmed that exposing EFL students to AVM contributes in promoting their speaking competency similar to those who interact in the ESL context. Using AMV has the potential to support teachers in diversifying the contents of their classes, thus promoting students' listening and speaking alike (Qizi, & Qizi, 2021).

Furthermore, using audio-visual aids proves as a critical factor not only in developing of students' skills such as speaking skills but also in enhancing their oral language fluency, which is an enabling factor for enhancing pronunciation, increasing vocabulary, fostering reading and writing skills, and developing listening efficiency (Ais, 2022). This helps students to bear upon their skill needed for developing creativity and upgrading productive skills. Teachers and researchers should prepare attractive and colorful teaching materials; authors can also produce inspiring materials for use of the students (Halverson, 2021). These steps, if planned well, will build storehouse of learning devices or materials combining realistic graphics, sound, and intelligible text which will in all probability go a long way in enhancing the much-needed English language communicative skills in the students and others.

As reported by Yang (2020), using TikTok provides multiple benefits and can aid in compiling videos in wide range and variety with helping features. Videos including English video clips and pre-recorded talks can be produced with bilingual subtitles that contain important words to facilitate improvement in arriving at deep and contextual meaning. Tools like these prove useful to both English teachers and students, thus making classrooms more attractive and dynamic. The collected original resource materials and devices can be transformed into short videos for uploading on TikTok (one of the latest devices in use in the modern era) for serving tools of instruction not only for improving English skills of student-learners but also for boosting their zeal and enthusiasm in language learning.

In addition, Horáková (2021) found that there would be better and enthusiastic engagement of students as a result of using AVM as an integral part of the teaching and learning process. This

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will increase interest of the learners of language to larger extent. As pointed out by Ordu (2021), classroom lectures delivered to students using AVM encourage or motivate learners to speak in English, have fun, interact fearlessly with peers and teachers in the classroom setting. Using the AVM provides students with the needed help to improve their language speaking proficiency. The literature review serves as great aid in the current researchers' effort to furnish reliable information about using audio-visual materials (as teaching tools) for helping students in improving their speaking skills.

3. Methods

Research Design

A quasi-experimental research design was adopted for the present study. As a well-known research design in education, the quasi-experimental research design usually but not often consists of pre-test-post-tests. It is the standard method for conducting research in education and suits research aiming to examine the effects of a proposed experiment/treatment on students' learning outcomes or performance in particular learning contexts (Byran et al., 2023; Campbell, & Stanley, 2015). According to these researchers, the quasi-experimental research design is effective for comparing students' performance in learning prior vs post the treatment/intervention. Thus, by using this research design, the present study was conducted in Semester during the academic year of 2023- 2024.

Participants

The study recruited 26 students of English at level 4. They enrolled in an English-speaking course at the English Department. The students were recruited to one group as they were joining this course during the semester. Their age average was almost 19 years old. They needed to respond to a questionnaire before and after the intervention. Moreover, a speaking test was administered to the students . The selection of the study sample was based on a proper random sampling process. This sampling represented the homogenous sample of the current study, taking into account the use of the pre-test-post-test design. Such random selection helped the researchers to avoid biased decisions on sample selection.

Data Collection

Prior to conducting the study, permission was obtained from the Dean of the College. For seeking permission, the purpose of the visit and objective of the study were discussed with the Dean. The permission (green signal) was related to the administration of the questionnaire to a group of students as a tool for relevant data collection. The permission was approved by the dean and the College coordinator (faculty member) was requested to make the necessary facilitative arrangements as desired by the researchers. The permission letter was obtained for record purposes. The facilitator teacher provided an account on the purpose of the study to the College Principal as well as the students during the classroom. The students were encouraged and they seemed motivated to take part in the study. The required session was duly scheduled. In order to ensure the reliability of the data obtained, the researchers personally ensured that the students understood all the questions of the survey. They were also given an opportunity to ask for

clarification unhesitatingly. Necessary directions to answer the questions were properly explained to them. The questionnaire was, however, administered online.

In keeping the objectives of the study in mind, the researchers used a three-phase treatment approach which entailed introduction of pre-test and post-test research design as basis. To begin with, the pre-test phase was conducted for assessing students' oral language fluency. This phase was followed by the implementation and then the evaluation. During the phase of administering the pre-tests to the participants, the messenger chat was used by the researchers for contacting the selected group of participants for purposes of collecting personal details and making phone calls to assess their oral fluency using rubrics. For the implementing Phase-2 (Implementation), the activity involved was to arrange a special group chat for the group of same students to explain mechanics of the Design and Development of Audio-Visual Materials (DAVM) to increase their oral language fluency. The time spent on taking the pre-test was also determined and recorded. For the post-treatment phase, the same group of students took their oral fluency test the second time by creating Tik Tok videos. They were asked to use English as the medium of communication for evaluating their improvements in oral language fluency (language speaking) from the pre-test as recorded. To ensure validation and reliability of the tool, language experts were requested to assess the reliability and validation of the tool. The test consisted of items that assessed pronunciation, fluency, vocabulary usage, grammatical accuracy, and coherence.

Data Analysis

Data collected from the pre-test and post-test was analyzed. A quantitative analysis was used for this purpose, including descriptive statistics such as the frequency, means, and standard deviations. These were used as measurement tools for scoring and interpreting the pre-test and post-test scores. For evaluation, a 5-point scale (4.21-5.00: Excellent, 3.41-4.20: Outstanding, 2.61-3.40: Acceptable, 1.81-2.60: Less Acceptable, 1.00-1.80: Inadequate) was used. The students' responses to the attitude survey were also analyzed prior and post to the interventions. The students were was asked to use DAVM. For this analysis, the 5-Point scale was adopted as: (4.21-5.00: Strongly Agree, 3.41-4.20: Agree, 2.61-3.40: Neutral, 1.81-2.60: Disagree, 1.00-1.80: Strongly Disagree).

4. Results

The results obtained in the current study are presented as follows:

Table 1. Depicting students' entry level speaking proficiency as revealed by the pre-test

Proficiency Statement	Mean Score	SD	Interpretation
It easy for me to deliver my message when I use English.	2.91	.90	Neutral
I can't pronouns well if I speak English.	3.26	.91	Neutral
I'm afraid to speak English publicly.	3.43	1.0	Agree
I always study to improve my speaking skills.	4.13	.81	Agree
Total mean	3.45	.50	Agree

Table 1 above depicts the speaking proficiency of the student-respondents in language speaking before they utilized the DAVM. The mean for the respondents' perception with their attitude towards English language was 3.45, which is interpreted as high/agreeable. It was found that the

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respondents' perception of the ease to deliver messages when using English language is neutral as displayed by the obtained mean of 2.91. Regarding the respondents' pronunciation of pronouns, it was found to be neutral as shown in the mean value of 3.26. The respondents agreed that they were shy of using English in public as the mean value of this item was 3.43, which is interpreted as agreeable. In addition, the majority of the student-respondents were regularly studying for bringing about improvement in their speaking skills (oral fluency). This is illustrated by the mean of 4.18, which was interpreted as strongly agree.

Table 2. Depicting gained level in speaking proficiency by students after they utilized AVM for increasing their oral language fluency

	,	
Proficiency Statement	Mean	Interpretation
	Score	
It easy for me to deliver my message when I use DAVM as my guide.	3.69	Agree
My proficiency in speaking strengthens with the help of DAVM	3.87	Agree
I was encouraged to speak English publicly using the DAVM	3.82	Agree
There is a positive effect of DAVM in honing my language fluency	4.08	Agree
DAVM increases my interest and motivate me to enhance my speaking skills	4.08	Agree
Total mean	3.91	Agree

Table 2 demonstrates the students' proficiency level in English language oral fluency after they were allowed to use the DAVM. In short, the student-respondents' proficiency level substantially improved as far as English language speaking ability/proficiency was concerned. They showed a mean score of 3.91, which is interpreted as high (positive effect). Based on the results obtained, it was found that the students agreed on the easiness experienced by them in delivering their messages using the DAVM. This was proved by the mean score of 3.69. Furthermore, the respondents claimed that they gained higher proficiency in language speaking, which was facilitated by their use of the DAVM. This item scored a mean value of 3.87. The results show that the student-respondents expressed positive views on their feeling of confidence in speaking English publicly, which was also facilitated and encouraged by the DAVM. Regarding this, the mean score was 3.82. It was also noticed that the DAVM had a positive effect in enhancing students' oral language fluency as as shown by the mean score of 4.08 in this respect. The student-respondents perceived the use of DAVM useful for increasing their interest and motivating/encouraging them to make effort aiming at enhancing their language speaking skills. This is evidenced from the mean score of 4.08.

Table 3. The pre-test and post-test results of the students in oral language fluency before and after using DAVM

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Proficiency score	Mean Score	SD	Interpretation	Mean Difference	t-value	Df	p-value
Pre- proficiency	3.45	.50	High	453	-3.92	22	.001**
Post- proficiency	3.91	.35	High				

^{*-} significant at 0.05 level

ns= not significant

As demonstrated by Table 3 above, there is evident difference in the students' proficiency level in language speaking before and after the DAVM was used by them as facilitating tool. The results revealed a significant difference in regard to language speaking proficiency level attained

^{**-} significant at 0.01 level

by students before and after the intervention. In other words, the computed t-value was -3.92 and the p value was 0.001, at par with alpha level of 0.01. Therefore, the null hypothesis that: "there is no significant difference on the level of proficiency of the respondents before and after the use of DAVM" is rejected (not proved) as there was a significant increase in their attainment.

Table 4. Depicting speaking level test administered to students

Speaking test	Post-test Mean Score	Interpretation
Pronunciation and accent	3.17	Acceptable
Fluency	3.21	Acceptable
Grammar	3.21	Acceptable
Communication	3.21	Acceptable
Total mean	3.20	Acceptable

Legends used:

4.21-5.00: Excellent

3.41-4.20: Outstanding

2.61-3.40: Acceptable

1.81-2.60: Less Acceptable

1:00-1.80: Inadequate

Perusal of Table 4 above displays the language speaking fluency level of the student-respondents after the test was given. This inference can be drawn regarding word-pronunciation and speech-accent of the student-respondents which can fall within the rate of "acceptable": these obtained mean core of 3.17. Moreover, the respondents' performance in fluency, grammar and communication was found "acceptable" as these aspects obtained a mean score of 3.21. that The students' language speaking performance was found to be "acceptable"; the parameters obtained a mean score of 3.20, which is indicates that the student-respondents' speaking skills improved as a result of using the DAVM in the course.

5. Discussion

The study showed that the respondents' attitude towards English before the intervention was high. This even increased as a result of implementing the AVM in the course. This is evidence that students' proficiency level substantially improved. The result demonstrates the awareness of Saudi students towards learning English. These results align with previous studies (e.g., Alqahtani, 2015; Almarshedi, 2022; Alrashidi, 2020) who pointed out that Saudi EFL students expressed their willingness to communicate in English.

In addition, the current study results indicated a difference in students' perception of English oral proficiency between the pre and post-tests. Their scores in the post test indicated that they had a higher level of perception than their perception in the pretest. The difference was found to be statistically significant. This enhancement in students' perception towards oral proficiency is attributable to the AVMs they used. This finding is consistent with the findings reported in

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several previous related studies on EFL learners' significant enhancement of oral fluency as a result of technology-related materials (Bahrani, 2011; Chamba & Gavilanes, 2019; Mahmoudi & Tasnimi, 2023; Qizi, & Qizi, 2021; Rahayu (2021). Bahrani (2011) affirmed that exposing EFL students to AVM contributes to their development of speaking competency similar to those who interact with others in the ESL context. Chamba and Gavilanes (2019) believed that original AVM play a role in enhancing fluency among university EFL students. These AVM aided two types of learning style students, i.e. those visual and auditory learners (Mahmoudi & Tasnimi, 2023). Using AMV seems potential for teachers in diversifying the contents of their lecture where their students are encouraged to promote thier listening and speaking alike (Qizi, & Qizi, 2021).

6. Conclusion

In conclusion, the current study addressed a crucial issue- the challenges encountered by Saudi EFL learners in oral skills in English due to the insufficient exposure to English in the EFL context (Almansour & Al-Ahdal, 2020). In responding to these challenges, the current study implemented the DAVM. The results provided evidence on their increasing scores after the intervention as indicated by the high and acceptable mean values. Moreover, based on their assessment, students' language speaking skill/ability was stronger and their performance got improved as illustrated by the mean value, interpreted aspleasant. The survey confirmed that using DAVM encouraged the respondents and made them more confident; they could overcome their hesitation and shyness and improved their oral communication and interaction, thus enhancing their oral proficiency in English.

Another conclusion of the study is the significant difference in the student-respondents' level of language speaking proficiency between the two stages prior and post to the intervention. This difference is proved through the assessment/measurement of thier performance in speaking.. In addition, this assessment led to rejecting that the null hypothesis that: "there is no significant difference in respondents' level of proficiency before and after using DAVM.

Finally, it can be concluded that after using DAVM led to enhancement of students' level of language speaking proficiency. The respondents' language speaking performance was found "acceptable as indicated by the mean value. This improvement seemed to be attributed to , a large extent, to the DAVM. As the findings are positive and encouraging and acknowledgement of the efficacy of DAVM, it is can be stated that the use of DAVM is an excellent strategy rather a boon from technology for enhancing English language speaking skills.

7. Recommendations

(i). The study provided evidence on the efficacy of AVM and DAVM in enhancing language speaking skill/ability. Therefore, these materials may be produced and used in other contexts, taking into account the local context and domestic/locale-specific culture in view while preparing such material. These materials may be integrated into language education and language instruction.

- (ii). Educational institutions should provide training to educators/teachers and also arrange seminars with the aim of equipping teachers with the necessary knowledge of various types of DAVM and to keep them updated with further technological developments.
- (iii). Educational institutions (schools, colleges and universities) should give top priority to the acquisition of AVM for ensuring their availability for use in every class.
- (iii). As the first stakeholders are students, support/guidance of teaches is also a significant factor for continuous improvement of language speaking skill. Thus, there can be incentive scheme and introduction of competition among students and encouragement to the teaching community at the institutional level. Incentives such as trophies, participation certificates and prizes will generate enthusiasm and also boost the morale of all those involved in the process of teaching and learning.
- (iv). There is always a scope for further research//study in every field of human activity not only on education. Therefore, at least innovated teaching material can be produced and updated at the institutional level. Teachers must play an active role in this regard. Organizations must give support and encouragement for the implementation of these interactive materials for further improvement.

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